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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,014	12/19/2001	Holger Janssen	1882	3598

7590 04/20/2004
STRIKER, STRIKER & STENBY
103 East Neck Road
Huntington, NY 11743

EXAMINER

SENGI, BEHROOZ M

ART UNIT	PAPER NUMBER
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2613

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DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,014

Applicant(s)

JANSSEN, HOLGER

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 - 3, 11, 12 and 16 – 18, are rejected under 35 U.S.C. 102(b) as being anticipated by Heimann et al (US 5,948,042).

Regarding claims 1 and 12, Heimann '042 discloses the “producing road or street data for a digital map” (i.e. fig. 1) comprising, “providing a vehicle with an image producing device” (i.e. vehicle 11 with video camera, col. 4, lines 38 – 39) and “generating image data of surroundings of the vehicle and position determining device for generating position of the vehicle” (i.e. abstract, col. 6, lines 25+, col. 2, lines 55 – 60) and “driving the vehicle over the road” (i.e. abstract”, and “during the driving of the vehicle and simultaneously collecting image data with the camera” (i.e. col. 5, lines 55 – col. 6, lines 31) and “analyzing the image data and correlating the vehicle position data and the road or street section” (i.e. traffic computer 20 of fig. 1).

Regarding claims 2 - 3, Heimann '042 discloses “camera for producing image” (i.e. col. 4, lines 38).

Regarding claims 11, 15 and 16, the limitation as claimed “transmitting the data to a central station”, reads on (fig. 2, data transmission section) and “exchange of information” (i.e. col. 1, lines 20 – 22).

Regarding claims 17 and 18, the claimed "interface" is necessitated by the traffic processor 20 of Heimann, for communication with other devices.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 – 6, 9 – 10, and 13 – 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Heimann '042 in view of Wilson et al (US 6,385,539).

Regarding claim 4, Heimann '042 teaches the "providing a vehicle with an image producing device" and "producing road or street data for a digital map" and "generating image data of surroundings of the vehicle and position determining device for generating position of the vehicle" (i.e. fig. 1, abstract, vehicle 11 with video camera, col. 4, lines 38 – 39). Heimann '042 fails to explicitly teach the claimed "absolute position of the vehicle". However, such features are well known and used in the art as evidenced by Wilson '539 (col. 1, lines 24+ and col. 6, lines 30+). Therefore, taking the combined teaching of Heimann '042 and Wilson '539 as a whole, it would have been obvious to equip the vehicle with absolute positioning sensors based upon a GPS to improve and obtain more accurate vehicle positioning as suggested by Wilson '539 (col. 6, lines 30 – 45).

Regarding claim 5, the limitation claimed "orientation of the vehicle in relation to an origin of a fixed coordinate" reads on "absolute position based upon GPS" as discussed above.

Regarding claims 6 and 13, combination of Heimann '042 and Wilson '539 teaches the claimed "description includes at least one road or street section relative to the vehicle, and spacing and longitudinal axis, street or road edge, and width" (i.e. fig. 6, col. 1, lines 50+ and col. 6, lines 28+, col. 10, lines 1 – 5 and col. 5, lines 8 – 10).

Regarding claims 9 – 10 and 14, combination of Heimann '042 and Wilson '539 teaches, "comparing the road or street section data with pre-existing road or street data and updating" (i.e. col. 3, lines 18 – 20, and col. 6, lines 1 – 3 of Heimann, and col. 1, lines 37 – 39, and col. 4, lines 54 – 56 of Wilson).

5. Claims 7 - 8, are rejected under 35 U.S.C. 103(a) as being unpatentable over Heimann '042 in view of Kinoshita et al (US 6,057,754).

Regarding claims 7 and 8, Heimann '042 teaches the "providing a vehicle with an image producing device" and "producing road or street data for a digital map" and "generating image data of surroundings of the vehicle and position determining device for generating position of the vehicle" (i.e. fig. 1, abstract, vehicle 11 with video camera, col. 4, lines 38 – 39). Heimann '042 fails to explicitly teach the claimed "coordinate system". However, such features are well known and used in the art as evidenced by Kinoshita '754 (figs 3 – 4, col. 4, lines 29 – 45, and col. 7, lines 15 - 25). Therefore, taking the combined teaching of Heimann '042 and Kinoshita '754 as a whole, it would have been obvious to improve the image processing of Heimann and detect road/object

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or vehicle position and the configuration of the road in terms of coordinates as taught by Kinoshita '754, to accurately assist the driver of the vehicle.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

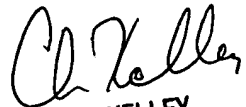
(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. S.

3/26/2004


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600